



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/604,086	06/27/2000	Sung Wook Kim	CU-2238	4337

909 7590 02/27/2004

PILLSBURY WINTHROP, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER

TRIMMINGS, JOHN P

ART UNIT	PAPER NUMBER
----------	--------------

2133

DATE MAILED: 02/27/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

DM.

Office Action Summary

Application No.

09/604,086

Applicant(s)

KIM ET AL.

Examiner

John P Trimmings

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2000.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-11 is/are rejected.
7) ☒ Claim(s) 1-11 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 27 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3 8/3/2000.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-11 are presented for examination.

Priority

The examiner acknowledges the claim for priority dated 6/27/2000.

Information Disclosure Statement

The examiner has considered the Information Disclosure documents.

Drawings

1. The drawings are objected to because there are errors in FIG.1 20 (there are two of 20) and FIG.2 ("aread" should read "ereard"). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms that are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: the applicant has indiscriminately used the word "bit" to describe data throughout the application. The word "bit" is a single binary

bit of data, either a "1" or a "0", thus one cannot divide one "bit" into two "bits", as lines 8 and 9 recite. Also, proper English form is not followed, as in lines 10 and 11. (i.e., page 1 line 11 should read, "position in which a fail is produced in a memory device..."). Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed). See MPEP § 608.01(b).

Claim Objections

3. Claim 1 is objected to because of the following informalities: line 4 should recite, "write a first data...". Line 5 should recite, "the first data of the certain bit...". Line 7 should recite, "dividing it into...". Line 8 should recite, "...with information about...". Line 11 should recite, "whether a fail is present.". Appropriate correction is required.

4. Claim 2 is objected to because of the following informalities: each step of the method should be indented in the claim. Appropriate correction is required.

5. Claim 3 is objected to because of the following informalities: line 1 should recite, "...as claimed in claim". Also, wherever the word "data" occurs in the claim, it should be preceded with the word "of". Appropriate correction is required.

6. Claim 4 is objected to because of the following informalities: line 11 should recite, "...2 bits of data.". Appropriate correction is required.

7. Claim 5 is objected to because of the following informalities: line 23 should recite, "...8 bits of data are divided into a upper". Line 24 should recite, "...4 bits of data or a lower 4 bits of data,". Appropriate correction is required.

8. Claim 6 is objected to because of the following informalities: line 29 should recite, "...comparing a upper...". Line 30 should recite, "a lower 4 bits of data". Line 31 should recite, "1 bit of compressed data indicating fail". Appropriate correction is required.

9. Claim 7 is objected to because of the following informalities: line 12 should recite, "...one bit of compressed...". Line 13 should recite, "a fail is present". Appropriate correction is required.

10. Claim 8 is objected to because of the following informalities: line 19 should recite, "...receiving a corresponding...". Line 21 should recite, "...receiving a corresponding...". Appropriate correction is required.

11. Claim 9 is objected to because of the following informalities: line 11 should recite, "generating 1 bit of compressed data with a fail information indicator." Appropriate correction is required.

12. Claim 10 is objected to because of the following informalities: line 15 should recite, "...8 bits of data". Line 16 should recite, "...4 bits of compressed data...". Line 17 should recite, "...comparing a upper or a lower 4 bits of data...". Line 18 should recite, "bits of prefetched...". Line 19 should recite, "...1 bit of compressed data with a fail information indicator...". Line 21 should recite, "...8 bits of prefetched data...". Appropriate correction is required.

13. Claim 11 is objected to because of the following informalities: line 29 should recite, "...a upper or a lower 4 bits of data...". Line 30 should recite, "of prefetched...". Line 33 should recite, "bits of data...". Appropriate correction is required.

Claim Rejections - 35 USC § 112

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. When the applicant refers in the claim to "a certain bit" or "certain bit", the examiner is unsure of what the applicant means. The context of the claim statement leads the examiner to believe that the number of "bits" in "a certain bit" or "certain bit" is 8, but the examiner is unsure because the applicant's terminology and language usage do not support that number. Therefore the claim is unclear to the examiner.

16. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. When the applicant refers in the claim to "a certain bit" or "certain bit", the examiner is unsure of what the applicant means. The context of the claim statement leads the examiner to believe that the number of "bits" in "a certain bit" or "certain bit" is 8, but the examiner is unsure because the applicant's terminology and

language usage do not support that number. Therefore the claim is unclear to the examiner.

17. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. When the applicant refers in the claim to "a certain bit" or "certain bit", the examiner is unsure of what the applicant means. The context of the claim statement leads the examiner to believe that the number of "bits" in "a certain bit" or "certain bit" is 8, but the examiner is unsure because the applicant's terminology and language usage do not support that number. Therefore the claim is unclear to the examiner.

18. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. When the applicant refers in the claim to "a certain bit" or "certain bit", the examiner is unsure of what the applicant means. The context of the claim statement leads the examiner to believe that the number of "bits" in "a certain bit" or "certain bit" is 8, but the examiner is unsure because the applicant's terminology and language usage do not support that number. Therefore the claim is unclear to the examiner.

19. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. When the applicant refers in the claim to "a certain bit" or "certain bit", the examiner is unsure of what the applicant means. The context of the

claim statement leads the examiner to believe that the number of "bits" in "a certain bit" or "certain bit" is 8, but the examiner is unsure because the applicant's terminology and language usage do not support that number. Therefore the claim is unclear to the examiner.

20. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 recites the limitation "the prefetched 8 bits data" and "the compressed 8 bits data" in lines 33 and 34. There is insufficient antecedent basis for this limitation in the claim. Also, the examiner is unclear as to what is being compared to the upper and lower 4 bits of data. Additionally, the examiner would like to point out that the 4th comparator appears to be the only unit that is being selected by the selection means.

21. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 7 recites the limitation "the respective comparator" and "the written 4 bits data" and "the read 4 bits data" in lines 5, 6, and 7 respectively. There is insufficient antecedent basis for this limitation in the claim.

22. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 recites the limitation "the written 4 bits data" and "the read 4 bits data" in lines 20 and 22 respectively. There is insufficient antecedent basis for this limitation in the claim.

23. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites the limitation "the first to the fourth comparing signal" and "the first to the fourth comparing means" in lines 9 and 10 respectively. The examiner believes that the applicant means "the first to a fourth comparing signal" and "the first to a fourth comparing means", but it is unclear and the examiner asks for clarification. Therefore, there is insufficient antecedent basis for this limitation in the claim.


24. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 recites the limitation "the control signal" and "the compressed 8 bits data" in lines 18 and 22 respectively. There is insufficient antecedent basis for this limitation in the claim. Additionally, the examiner would like to point out that the 4th comparator appears to be the only unit that is being selected by the selection means.

25. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 recites the limitation "the control signal" and "the compressed 8 bits data" and "the control signal" and "the core cell region" in lines 30, 32, 34 and 1 respectively. There is insufficient antecedent basis for this limitation in the claim.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P Trimmings whose telephone number is 703-305-0714. The examiner can normally be reached on weekdays, 7:30 AM to 4:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John P Trimmings
Examiner
Art Unit 2133

jpt


for
Albert DeCady
Primary Examiner